

## **WHAT IS CLAIMED IS:**

1. A ratchet socket, comprising:

a socket body having an end formed with a mounting hole;

the mounting hole having an inner wall formed with twelve resting

5 protrusions and twelve chambers located between the resting protrusions.

2. The ratchet socket in accordance with claim 1, wherein the twelve resting protrusions are arranged in an annular manner.

3. The ratchet socket in accordance with claim 1, wherein the twelve resting protrusions are equally spaced from each other.

10 4. The ratchet socket in accordance with claim 1, wherein each of the twelve resting protrusions has an outer end formed with an inclined surface.

5. The ratchet socket in accordance with claim 1, wherein each of the twelve resting protrusions has a side end formed with a resting face.

15 6. The ratchet socket in accordance with claim 5, wherein the resting face of each of the twelve resting protrusions has an arcuate shape.

7. The ratchet socket in accordance with claim 1, wherein the ratchet socket is used to operate a gear-shaped screw.

8. The ratchet socket in accordance with claim 7, wherein the gear-shaped screw includes a main body having an outer wall formed with  
20 twelve toothed portions and twelve receiving recesses located between the twelve toothed portions, each of the twelve resting protrusions of the ratchet socket is received in a respective one of the twelve receiving recesses of the

gear-shaped screw, and the resting face of each of the twelve resting protrusions of the ratchet socket is rested on a side of a respective one of the twelve toothed portions of the gear-shaped screw, so that the ratchet socket is combined with the gear-shaped screw.

5           9. The ratchet socket in accordance with claim 1, wherein the ratchet socket is used to operate a ratchet screw.

10           10. The ratchet socket in accordance with claim 9, wherein the ratchet screw includes a main body having an outer wall formed with twelve ratchet teeth and twelve urging faces located between the twelve ratchet teeth, the resting face of each of the twelve resting protrusions of the ratchet socket is rested on a respective one of the twelve urging faces of the ratchet screw, and each of the twelve ratchet teeth of the ratchet screw is received in a respective one of the twelve chambers of the ratchet socket, so that the ratchet socket is combined with the ratchet screw.

15           11. The ratchet socket in accordance with claim 1, wherein the ratchet socket is used to operate a star-shaped screw.

20           12. The ratchet socket in accordance with claim 11, wherein the star-shaped screw includes a main body having an outer wall formed with six chamfers and six arcuate faces located between the six chamfers, the resting face of each of the twelve resting protrusions of the ratchet socket is rested on a respective one of the six arcuate faces of the star-shaped screw, and each of the six chamfers of the star-shaped screw is received in a respective one of the

twelve chambers of the ratchet socket, so that the ratchet socket is combined with the star-shaped screw.

13. The ratchet socket in accordance with claim 1, wherein the ratchet socket is used to operate a metric screw.

5           14. The ratchet socket in accordance with claim 13, wherein the metric screw includes a main body having an outer wall formed with six side faces and six corners, the resting face of each of the twelve resting protrusions of the ratchet socket is rested on a respective one of the six side faces of the metric screw, and each of the six corners of the metric screw is received in a  
10       respective one of the twelve chambers of the ratchet socket, so that the ratchet socket is combined with the metric screw.

15. The ratchet socket in accordance with claim 1, wherein the ratchet socket is used to operate a British screw.

16. The ratchet socket in accordance with claim 1, wherein the  
15       ratchet socket is used to operate a tetragonal screw.

17. The ratchet socket in accordance with claim 1, wherein the ratchet socket is used to operate an octagonal screw.

18. The ratchet socket in accordance with claim 1, wherein the ratchet socket is used to operate a dodecagonal screw.

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